AAY82326 standard; protein; 357 AA.

<!--StartFragment-->RESULT 4

AAY82326

ID

```
XX
АC
     AAY82326;
XX
DT
     21-JUN-2000 (first entry)
XX
     Human arginase I SEQ ID NO:17.
DE
XX
KW
     Human; arginase II; arginase I; diagnosis; hypotensive; hypertensive;
     uropathic; cytostatic; neuroprotective; gene therapy; hypertension;
KW
     nitric oxide biosynthesis modulator; urea cycle disease; hypotension;
KW
     episodic hyperammonaemia; hyperargininaemia; spasticity; prostatitis;
ΚW
     growth retardation; progressive mental impairment; prostate disease;
KW
     prostate cancer; benign prostatic hyperplasia; hypertrophy;
KW
KW
     prostate damage; kidney disease; kidney damage.
XX
OS
     Homo sapiens.
XX
PN
     US6054308-A.
XX
PD
     25-APR-2000.
XX
PF
     15-JUL-1998;
                   98US-00116115.
XX
PR
     14-MAR-1996;
                   96US-0013395P.
     20-AUG-1996;
                    96US-00700186.
PR
PR
     20-AUG-1997;
                    97US-00914981.
XX
PA
     (HUMA-) HUMAN GENOME SCI INC.
     (SMIK ) SMITHKLINE BEECHAM CORP.
PA
XX
PΙ
     Dillon PJ, Vockley JG;
XX
     WPI; 2000-328355/28.
DR
     N-PSDB; AAA08074.
DR
XX
     Novel human arginase II polypeptides useful for treating urea cycle
PT
     diseases, hypertension, hypotension, episodic hyperammonemia, to control
PΤ
     nitric oxide formation and kidney damage.
PT
XX
PS
     Example 1; Col 49-52; 37pp; English.
XX
CC
     The present invention describes human arginase II. Arginase II has
     hypotensive, hypertensive, uropathic, cytostatic and neuroprotective
CC
CC
     activities, and can be used in gene therapy and as a nitric oxide
     biosynthesis modulator. Human arginase II proteins can be used to treat
CC
CC
     diseases associated with or caused by a defect in the arginase II gene or
```

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CC
    arginase II gene expression, such as, for e.g. urea cycle diseases,
CC
    hypertension, hypotension, episodic hyperammonaemia, defects in
    biosynthesis of proline, glutamate, nitric oxide and ornithine, as well
CC
CC
    as hyperargininaemia and its related spasticity, growth retardation, and
CC
    progressive mental impairment, and prostate disease, particularly
    prostate cancer, prostatitis and benign prostatic hyperplasia or
CC
CC
    hypertrophy, and also prostate damage, kidney disease and kidney damage.
CC
    It is also used to control nitric oxide formation in an individual.
CC
    Arginase II or its fragments, variants or derivatives can be used as
CC
    diagnostic reagents for diagnosing arginase II deficiency in an
CC
    individual having or suspected of having a defect in the nitric oxide
    pathway and the urea cycle. The genes encoding arginase II are used in
CC
CC
    gene therapy techniques to treat the above mentioned disorders. It is
CC
    also used to deplete systemic arginine levels in an individual. The
    present sequence represents human arginase I, which is used in an example
CC
CC
    from the present invention
XX
SQ
    Sequence 357 AA;
 Query Match
                      100.0%; Score 1678; DB 3; Length 357;
                      100.0%;
                             Pred. No. 2.4e-162;
 Best Local Similarity
 Matches
         322; Conservative
                           0; Mismatches
                                            0;
                                                Indels
                                                        0;
                                                                   0;
                                                            Gaps
          1 MSAKSRTIGIIGAPFSKGQPRGGVEEGPTVLRKAGLLEKLKEQECDVKDYGDLPFADIPN 60
Qу
            18 MSAKSRTIGIIGAPFSKGQPRGGVEEGPTVLRKAGLLEKLKEQECDVKDYGDLPFADIPN 77
Db
         61 DSPFQIVKNPRSVGKASEQLAGKVAQVKKNGRISLVLGGDHSLAIGSISGHARVHPDLGV 120
Qу
            Db
         78 DSPFQIVKNPRSVGKASEQLAGKVAQVKKNGRISLVLGGDHSLAIGSISGHARVHPDLGV 137
        121 IWVDAHTDINTPLTTTSGNLHGQPVSFLLKELKGKIPDVPGFSWVTPCISAKDIVYIGLR 180
Qу
            Db
        138 IWVDAHTDINTPLTTTSGNLHGQPVSFLLKELKGKIPDVPGFSWVTPCISAKDIVYIGLR 197
        181 DVDPGEHYILKTLGIKYFSMTEVDRLGIGKVMEETLSYLLGRKKRPIHLSFDVDGLDPSF 240
Qу
            Db
        198 DVDPGEHYILKTLGIKYFSMTEVDRLGIGKVMEETLSYLLGRKKRPIHLSFDVDGLDPSF 257
        241 TPATGTPVVGGLTYREGLYITEEIYKTGLLSGLDIMEVNPSLGKTPEEVTRTVNTAVAIT 300
Qу
            258 TPATGTPVVGGLTYREGLYITEEIYKTGLLSGLDIMEVNPSLGKTPEEVTRTVNTAVAIT 317
Db
        301 LACFGLAREGNHKPIDYLNPPK 322
Qу
```

<!--EndFragment-->

Db

318 LACFGLAREGNHKPIDYLNPPK 339